FILE 'HOME' ENTERED AT 14:47:47 ON 13 SEP 2002

=> file agriculture
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'AGRICOLA' ENTERED AT 14:48:00 ON 13 SEP 2002

FILE 'BIOBUSINESS' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 Biological Abstracts, Inc. (BIOSIS)

FILE 'BIOCOMMERCE' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 BioCommerce Data Ltd. Richmond Surrey, United Kingdom. All rights reserved

FILE 'BIOSIS' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'BIOTECHNO' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'CABA' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 CAB INTERNATIONAL (CABI)

FILE 'CAPLUS' ENTERED AT 14:48:00 ON 13 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CBNB' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (c) 2002 ELSEVIER ENGINEERING INFORMATION, INC.

FILE 'CIN' ENTERED AT 14:48:00 ON 13 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 American Chemical Society (ACS)

FILE 'CONFSCI' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 Cambridge Scientific Abstracts (CSA)

FILE 'CROPB' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 THOMSON DERWENT

FILE 'CROPU' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 THOMSON DERWENT

FILE 'ESBIOBASE' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'FEDRIP' ENTERED AT 14:48:00 ON 13 SEP 2002

FILE 'FOMAD' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 Leatherhead Food Research Association

FILE 'FOREGE' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 Leatherhead Food Research Association

FILE 'FROSTI' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 Leatherhead Food Research Association

FILE 'FSTA' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 International Food Information Service

FILE 'GENBANK' ENTERED AT 14:48:00 ON 13 SEP 2002

FILE 'IFIPAT' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 IFI CLAIMS(R) Patent Services (IFI)

FILE 'INVESTEXT' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 Thomson Financial Services, Inc. (TFS)

FILE 'LIFESCI' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 Cambridge Scientific Abstracts (CSA)

FILE 'NAPRALERT' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 Board of Trustees of the University of Illinois, University of Illinois at Chicago.

FILE 'NTIS' ENTERED AT 14:48:00 ON 13 SEP 2002 Compiled and distributed by the NTIS, U.S. Department of Commerce. It contains copyrighted material. All rights reserved. (2002)

FILE 'PASCAL' ENTERED AT 14:48:00 ON 13 SEP 2002 Any reproduction or dissemination in part or in full, by means of any process and on any support whatsoever is prohibited without the prior written agreement of INIST-CNRS. COPYRIGHT (C) 2002 INIST-CNRS. All rights reserved.

FILE 'PHIC' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 PJB Publications Ltd. (PJB)

FILE 'PHIN' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 PJB Publications Ltd. (PJB)

FILE 'PROMT' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 Gale Group. All rights reserved.

FILE 'SCISEARCH' ENTERED AT 14:48:00 ON 13 SEP 2002 COPYRIGHT (C) 2002 Institute for Scientific Information (ISI) (R)

FILE 'USPATFULL' ENTERED AT 14:48:00 ON 13 SEP 2002 CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 14:48:00 ON 13 SEP 2002 CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

=> s glucanotransferase and alpha and transformation
25 FILES SEARCHED...
L1 61 GLUCANOTRANSFERASE AND ALPHA AND TRANSFORMATION

=> s glucanotransferase and alpha and transform?
25 FILES SEARCHED...

L2 131 GLUCANOTRANSFERASE AND ALPHA AND TRANSFORM?

=> duplicate remove 12
DUPLICATE IS NOT AVAILABLE IN 'BIOCOMMERCE, FEDRIP, FOREGE, GENBANK, INVESTEXT'.

ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE DUPLICATE PREFERENCE IS 'AGRICOLA, BIOBUSINESS, BIOSIS, BIOTECHNO, CABA, CAPLUS, ESBIOBASE, FSTA, GENBANK, IFIPAT, LIFESCI, PASCAL, SCISEARCH, USPATFULL' KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L2

L3 105 DUPLICATE REMOVE L2 (26 DUPLICATES REMOVED)

=> s 13 and plant

8 FILES SEARCHED... 25 FILES SEARCHED... L4 48 L3 AND PLANT

```
=> s 14 and 4-ALPHA-GLUCANOTRANSFERASE
  16 FILES SEARCHED...
             8 L4 AND 4-ALPHA-GLUCANOTRANSFERASE
L5
=> d 15 1-8
     ANSWER 1 OF 8 AGRICOLA
L5
AN
     1998:49597 AGRICOLA
     IND21378974
DN
     Normal starch content and composition in tubers of antisense potato
TI
     plants lacking D-enzyme (4-alpha-
     glucanotransferase).
     Takaha, T.; Critchley, J.; Okada, S.; Smith, S.M.
ΑU
ΑV
     DNAL (450 P693)
     Planta, July 1998. Vol. 205, No. 3. p. 445-451
SO
     Publisher: Berlin ; New York : Springer-Verlag, 1925-
     CODEN: PLANAB; ISSN: 0032-0935
NTE
     Includes references
CY
     Germany
     Article
DT
FS
     Non-U.S. Imprint other than FAO
LA
     English
     ANSWER 2 OF 8 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
L5
     2000:281897 BIOSIS
AN
DN
     PREV200000281897
ΤI
     Corn 4-alpha-glucanotransferase.
ΑU
     Broglie, Karen E. (1); Krebbers, Enno
CS
     (1) Newark, DE USA
     ASSIGNEE: E. I. du Pont de Nemours and Company, Upper Marlboro, MD, USA
     US 5994623 November 30, 1999
PΙ
     Official Gazette of the United States Patent and Trademark Office Patents,
SO
     (Nov. 30, 1999) Vol. 1228, No. 5, pp. No pagination. e-file.
     ISSN: 0098-1133.
     Patent
TG
LA
     English
L5
     ANSWER 3 OF 8 CAPLUS COPYRIGHT 2002 ACS
ΑN
     1998:682547 CAPLUS
DN
     129:299048
TI
     Plant 4-alpha-glucanotransferases
     and cDNAs and their expression in plant cells to alter levels of
     glucanotransferase
     Broglie, Karen E.; Krebbers, Enno; Pearlstein, Richard W.
IN
     E.I. Du Pont De Nemours and Company, USA
PΑ
SO
     PCT Int. Appl., 53 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO.
     _____
                       _ _ _ _
                             _____
                                            -----
PΙ
     WO 9845459
                      A1
                            19981015
                                            WO 1998-US6737
                                                              19980407
         W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GW, HU, ID, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG,
             MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, ML, MR, NE, SN, TD, TG
     US 5994623
                            19991130
                                            US 1997-838543
                       Α
                                                              19970409
                                            AU 1998-68845
                                                              19980407
     AU 9868845
                       Α1
                             19981030
                                            EP 1998-914506
     EP 973919
                             20000126
                       A1
                                                              19980407
```

```
R: DE, FR, GB
    BR 9815487
                            20011009
                                           BR 1998-15487
                                                             19980407
                       Α
PRAI US 1997-838543
                       A2
                            19970409
     WO 1998-US6737
                       W
                            19980407
     ANSWER 4 OF 8 FSTA COPYRIGHT 2002 IFIS
L5
     1998(09):J2225
                      FSTA
AN
     Normal starch content and composition in tubers of antisense potato
TI
     plants lacking D-enzyme (4-.alpha.-
     glucanotransferase).
     Takaha, T.; Critchley, J.; Okada, S.; Smith, S. M.
ΑU
     Correspondence (Reprint) address, S. M. Smith, Inst. of Cell & Molecular
CS
     Biol., Univ. of Edinburgh, Edinburgh EH9 3JH, UK. Tel. 44 (131) 650 5318.
     Fax 44 (131) 650 5392. E-mail ssmith(a)srv0.bio.ed.ac.uk
     Planta, (1998), 205 (3) 445-451, 28 ref.
SO
     ISSN: 0032-0935
DТ
     Journal
     English
LA
                          GENBANK.RTM. COPYRIGHT 2002
     ANSWER 5 OF 8
L5
LOCUS (LOC):
                                     GenBank (R)
                        BQ627921
GenBank ACC. NO. (GBN): BQ627921
                        437392-02-4
CAS REGISTRY NO. (RN):
SEQUENCE LENGTH (SQL):
                        620
                        mRNA; linear
MOLECULE TYPE (CI):
                        Expressed sequence tag
DIVISION CODE (CI):
DATE (DATE):
                        2 Jul 2002
                        sao65q09.y2 Gm-c1073 Glycine max cDNA clone SOYBEAN
DEFINITION (DEF):
                        CLONE ID: Gm-c1073-4169 5' similar to TR:022198 022198
                        PUTATIVE 4-ALPHA-
                        GLUCANOTRANSFERASE. ;, mRNA sequence.
                        soybean.
SOURCE:
 ORGANISM (ORGN):
                        Glycine max
                        Eukaryota; Viridiplantae; Streptophyta; Embryophyta;
                        Tracheophyta; Spermatophyta; Magnoliophyta;
                        eudicotyledons; core eudicots; Rosidae; eurosids I;
                        Fabales; Fabaceae; Papilionoideae; Phaseoleae; Glycine
NUCLEIC ACID COUNT (NA): 198 a
                                 123 c
                                        117 q
COMMENT:
     Contact: Shoemaker R/Public Soybean EST Project
     Public Soybean EST Project
     Washington University School of Medicine
     4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
     Tel: 314 286 1800
     Fax: 314 286 1810
     Email: est@watson.wustl.edu
     This clone is available through: ResGen, Invitrogen Corp. 2130
     South Memorial Parkway Huntsville, AL 35801 For further information
     call: (800)-533-4363 or contact: ccu@resgen.com web site:
     www.resgen.com
     Seq primer: -40RP from Gibco
     High quality sequence stop: 424.
                        1 (bases 1 to 620)
REFERENCE:
                        Shoemaker, R.; Keim, P.; Vodkin, L.; Erpelding, J.;
   AUTHOR (AU):
                        Coryell, V.; Khanna, A.; Bolla, B.; Marra, M.; Hillier, L.;
                        Kucaba, T.; Martin, J.; Beck, C.; Wylie, T.; Underwood, K.;
                        Steptoe, M.; Theising, B.; Allen, M.; Bowers, Y.;
                        Person, B.; Swaller, T.; Gibbons, M.; Pape, D.; Harvey, N.;
                        Schurk,R.; Ritter,E.; Kohn,S.; Shin,T.; Jackson,Y.;
                        Cardenas, M.; McCann, R.; Waterston, R.; Wilson, R.
   TITLE (TI):
                        Public Soybean EST Project
                        Unpublished (1999)
   JOURNAL (SO):
```

FEATURES (FEAT):

Feature Key Location Qualifier

source 1..620

/organism="Glycine max" /db-xref="taxon:3847" /clone="SOYBEAN CLONE ID: Gm-c1073-4169" /clone-lib="Gm-c1073" /tissue-type="seedlings induced for symptoms of SDS (Sudden Death Syndrome) disease" /dev-stage="2-3 weeks old" /lab-host="DH10B" /note="Vector: pBluescript II SK+; Site-1: EcoRI; Site-2: XhoI; The cDNA library was constructed from mRNA isolated from 2-3 week old seedlings that were induced for symptoms of SDS (Sudden Death Syndrome) disease by the translocation of culture filtrate of Fusarium solani f. sp. glycines (Plant Cell Report 18:375-380). Cultivar Williams 82 is susceptible to the disease SDS. Plant tissue (expanded leaves, folded leaves, and new shoots) were collected at 1, 6, 24, and 48 hrs. after inoculation and their mRNA pooled equally for cDNA construction. The library was prepared using the Stratagene pBluescript II SK(+) library construction kit. Complementary DNA was synthesized from mRNA using a primer consisting of a poly(dT) sequence with an XhoI restriction site. EcoRI adaptors were ligated to the blunt-ended cDNA fragments followed by XhoI digestion. The cDNA insert is protected from XhoI digestion via methylation during first strand synthesis. The cDNA fragments were directionally cloned into the EcoRI-XhoI restriction site of the pBluescript vector. The ligated cDNA fragments were transformed into E.coli ElectroMax DH10B host cells. Plants were inoculated by Shuxian Li (Glen Hartman lab, University of Illinois). Library was constructed by Reena Philip and Steve Clough (Lila Vodkin lab, University of Illinois)."

SEQUENCE (SEQ):

1 atcttcctc ttcaggactt gctagcatta aaagaagaat atacaacacg ccctgcaaca 61 gaggagacaa tcaatgaccc tacgaatccg aagcactatt ggagattccg tgtgcatgtg 121 actttggaat cattgatcaa ggataatgac ctccaaacca ccatcaaaga tctcgtcagt 181 tggagtggaa gatcacttct taaggaagac gactcagaaa tagaagcgag cccagtgtcg 241 gtgttgtcag cagcagaagc tctttctgag aagcagaagt ttgccagtac cacggaaaag 301 cctgttcttg tcaaataaaa attgtagctg atgttattca tgctagtcct tcaaatcata

361 ttatatccta taacctgcta agatgaagat aacaataagg atcatccgtg ctctgttcca

```
421 totgtttgca ttatgtttct taatgaagto tacaaataaa tottgatgca tgtattgttt
   481 atgtcctgcc cataagttgt agcttttata ataatagtaa tagtaattat aagaggtact
   541 ccgtactcat aatgcaagtg taaataaaac aatattgtgc aacatttaag tcaggctttc
   601 tgcttgatac tcactggcct
     ANSWER 6 OF 8
                          GENBANK.RTM. COPYRIGHT 2002
L5
LOCUS (LOC):
                        BQ298875
                                     GenBank (R)
GenBank ACC. No. (GBN): BQ298875
CAS REGISTRY NO. (RN): 424100-95-8
SEQUENCE LENGTH (SQL): 398
MOLECULE TYPE (CI):
                        mRNA; linear
DIVISION CODE (CI):
                        Expressed sequence tag
                        16 May 2002
DATE (DATE):
DEFINITION (DEF):
                        sao52a05.y1 Gm-c1073 Glycine max cDNA clone SOYBEAN
                        CLONE ID: Gm-c1073-2698 5' similar to TR:022198 022198
                        PUTATIVE 4-ALPHA-
                        GLUCANOTRANSFERASE. ;, mRNA sequence.
SOURCE:
                        soybean.
ORGANISM (ORGN):
                        Glycine max
                        Eukaryota; Viridiplantae; Streptophyta; Embryophyta;
                        Tracheophyta; Spermatophyta; Magnoliophyta;
                        eudicotyledons; core eudicots; Rosidae; eurosids I;
                        Fabales; Fabaceae; Papilionoideae; Phaseoleae; Glycine
NUCLEIC ACID COUNT (NA): 126 a 81 c 77 g
                                                114 t
COMMENT:
     Contact: Shoemaker R/Public Soybean EST Project
     Public Soybean EST Project
     Washington University School of Medicine
     4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
     Tel: 314 286 1800
     Fax: 314 286 1810
     Email: est@watson.wustl.edu
     This clone is available through: ResGen, Invitrogen Corp. 2130
     South Memorial Parkway Huntsville, AL 35801 For further information
     call: (800)-533-4363 or contact: ccu@resgen.com web site:
     www.resgen.com
     Seq primer: -40RP from Gibco.
REFERENCE:
                        1 (bases 1 to 398)
  AUTHOR (AU):
                        Shoemaker, R.; Keim, P.; Vodkin, L.; Erpelding, J.;
                        Coryell, V.; Khanna, A.; Bolla, B.; Marra, M.; Hillier, L.;
Kucaba, T.; Martin, J.; Beck, C.; Wylie, T.; Underwood, K.;
                        Steptoe, M.; Theising, B.; Allen, M.; Bowers, Y.;
                        Person,B.; Swaller,T.; Gibbons,M.; Pape,D.; Harvey,N.;
Schurk,R.; Ritter,E.; Kohn,S.; Shin,T.; Jackson,Y.;
                        Cardenas,M.; McCann,R.; Waterston,R.; Wilson,R.
  TITLE (TI):
                        Public Soybean EST Project
  JOURNAL (SO):
                        Unpublished (1999)
FEATURES (FEAT):
  Feature Key
                   Location
                                            Qualifier
source
                1..398
                                         /organism="Glycine max"
                                         /db-xref="taxon:3847"
                                         /clone="SOYBEAN CLONE ID:
                                         Gm-c1073-2698"
                                         /clone-lib="Gm-c1073"
                                         /tissue-type="seedlings induced
                                         for symptoms of SDS (Sudden Death
                                         Syndrome) disease"
                                         /dev-stage="2-3 weeks old"
                                         /lab-host="DH10B"
                                         /note="Vector: pBluescript II SK+;
                                         Site-1: EcoRI; Site-2: XhoI; The
```

cDNA library was constructed from mRNA isolated from 2-3 week old seedlings that were induced for symptoms of SDS (Sudden Death Syndrome) disease by the translocation of culture filtrate of Fusarium solani f. sp. glycines (Plant Cell Report 18:375-380). Cultivar Williams 82 is susceptible to the disease SDS. Plant tissue (expanded leaves, folded leaves, and new shoots) were collected at 1, 6, 24, and 48 hrs. after inoculation and their mRNA pooled equally for cDNA construction. The library was prepared using the Stratagene pBluescript II SK(+) library construction kit. Complementary DNA was synthesized from mRNA using a primer consisting of a poly(dT) sequence with an XhoI restriction site. EcoRI adaptors were ligated to the blunt-ended cDNA fragments followed by XhoI digestion. The cDNA insert is protected from XhoI digestion via methylation during first strand synthesis. The cDNA fragments were directionally cloned into the EcoRI-XhoI restriction site of the pBluescript vector. The ligated cDNA fragments were transformed into E.coli ElectroMax DH10B host cells. Plants were inoculated by Shuxian Li (Glen Hartman lab, University of Illinois). Library was constructed by Reena Philip and Steve Clough (Lila Vodkin lab, University of Illinois)."

SEQUENCE (SEO):

```
61 aaagataatg acctccaaac cgccatcaaa gatctcgtac gttggagtgg aagatcactc
121 cctaaggaag acgactcaga agtagaagtg agcccagtgt cggcgttgtc atcagcagaa
181 gctctttctg agaagcagca gtttgccggt accatggaaa agcctgttct tgtcaaataa
241 aaattgtagc tgatgttatt catgctagct cttcaaatca tattatatcc tataatctgc
301 taccttgaag ataacaacaa taaggatcat ccttgttata tgttccatct gtttgcatta
361 tgttcttaa taaagaatac aaataaatct tgatgcaa

L5 ANSWER 7 OF 8 USPATFULL
AN 2002:221971 USPATFULL
TI ENTEROCOCCUS FAECALIS POLYNUCLEOTIDES AND POLYPEPTIDES
```

1 cctacgaatc cgaagcacta ttggagatac cgtgtgcatg tgactttgga atcactgatc

```
TN
       KUNSCH, CHARLES A., ATLANTA, GA, UNITED STATES
       DILLON, PATRICK J., CARLSBAD, CA, UNITED STATES
       BARASH, STEVEN, ROCKVILLE, MD, UNITED STATES
PΙ
       US 2002120116
                         A1
                               20020829
ΑI
       US 1998-70927
                          A1
                               19980504 (9)
DT
       Utility
FS
       APPLICATION
LN.CNT 13315
INCL
      INCLM: 536/023.200
```

INCLS: 435/069.100; 435/070.100; 435/071.100; 435/252.300; 435/320.100; 530/350.000; 530/387.900; 800/013.000

```
NCL
       NCLM: 536/023.200
              435/069.100; 435/070.100; 435/071.100; 435/252.300; 435/320.100;
       NCLS:
              530/350.000; 530/387.900; 800/013.000
IC
       [7]
       ICM: C07K016-00
     ANSWER 8 OF 8 USPATFULL
L5
       2000:171190 USPATFULL
AN
       Modified starch from plants, plants synthesizing
ΤI
       this starch, and processes for its preparation
IN
       Kossmann, Jens, Golmer Fichten 9, Golm 14476, Germany, Federal Republic
       οf
       Springer, Franziska, Muhlenstr. 1, Berlin 14167, Germany, Federal
       Republic of
       Buttcher, Volker, Hundebreite 39, Lauenforde 37697, Germany, Federal
       Republic of
PΙ
       US 6162966
                               20001219
       WO 9627674 19960912
       US 1998-913671
AΙ
                               19980202 (8)
       WO 1996-EP1007
                               19960308
                               19980202 PCT 371 date
                               19980202 PCT 102(e) date
       DE 1995-19509695
PRAI
                           19950308
DT
       Utility
FS
       Granted
LN.CNT 1266
INCL
       INCLM: 800/284.000
       INCLS: 800/286.000; 800/317.200; 435/101.000; 435/193.000; 435/419.000;
              435/468.000; 536/023.600
NCL
       NCLM:
              800/284.000
       NCLS:
              435/101.000; 435/193.000; 435/419.000; 435/468.000; 536/023.600;
              800/286.000; 800/317.200
IC
       [7]
       ICM: A01H005-00
       ICS: A01H005-06; C12N015-29; C12N015-82
EXF
       800/284; 800/286; 800/298; 800/317.2; 435/419; 435/468; 435/193;
       435/101; 536/23.6
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
```

```
ANSWER 1 OF 7 AGRICOLA
                                                               DUPLICATE 1
AN
     2001:73174 AGRICOLA
DN
     IND23227281
     A critical role for disproportionating enzyme in starch breakdown is
     revealed by a knock-out mutation in Arabidopsis.
     Critchley, J.H.; Zeeman, S.C.; Takaha, T.; Smith, A.M.; Smith, S.M.
ΑU
     The Plant journal: for cell and molecular biology, Apr 2001. Vol. 26, No.
SO
     1. p. 89-100
     Publisher: Oxford : Blackwell Sciences Ltd.
     ISSN: 0960-7412
NTE Includes references
     England; United Kingdom
CY
DT
     Article
FS
     Non-U.S. Imprint other than FAO
LA
     English
     ANSWER 2 OF 7 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
L3
     2001:44125 BIOSIS
AN
     PREV200100044125
DN
TI
     The Saccharomyces cerevisiae YPR184w gene encodes the glycogen debranching
ΑU
     Teste, Marie Ange; Enjalbert, Brice; Parrou, Jean Luc; Francois, Jean M.
      (1)
CS
      (1) Centre de Bioingenierie Gilbert Durand, Departement de Genie
     Biochimique et Alimentaire, Complexe Scientifique de Ranqueil, UMR-CNRS
     5504, UR-INRA 792, 31077, Toulouse Cedex 04: fran_jm@insa-tlse.fr France
     FEMS Microbiology Letters, (1 December, 2000) Vol. 193, No. 1, pp.
SO
     105-110. print.
     ISSN: 0378-1097.
DT
     Article
T.A
     English
SL
     English
L3
     ANSWER 3 OF 7 CAPLUS COPYRIGHT 2002 ACS
     1999:811373 CAPLUS
AN
     132:45849
DN
TI
     Chlamydomonas enzyme D and cDNA and method of altering starch structure in
     plants
     Ball, Steven
IN
     Biogemma, Fr.
PA
SO
     PCT Int. Appl., 52 pp.
     CODEN: PIXXD2
DT
     Patent
     French
LA
FAN.CNT 1
     PATENT NO.
                        KIND DATE
                                               APPLICATION NO. DATE
                        _ _ _ _
PΙ
                        A1 19991223
                                                WO 1999-FR1446
                                                                  19990616
     WO 9966056
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
              MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
              ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
              CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     FR 2779740
                         A1
                              19991217
                                                FR 1998-7589
                                                                    19980616
     FR 2779740
                         B1
                               20020628
     AU 9941511
                               20000105
                                                AU 1999-41511
                         A1
                                                                    19990616
     EP 1088089
                         A1
                              20010404
                                               EP 1999-925114
                                                                    19990616
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
```

```
PRAI FR 1998-7589
                       Α
                             19980616
     WO 1999-FR1446
                      W
                             19990616
              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 4 OF 7 AGRICOLA
                                                          DUPLICATE 2
L3
AN
     1999:76468 AGRICOLA
     IND22011499
DN
     Biochemical characterization of the Chlamydomonas reinhardtii
TТ
     alpha-1,4 glucanotransferase
     supports a direct function in amylopectin biosynthesis.
     Colleoni, C.; Dauvillee, D.; Mouille, G.; Morell, M.; Samuel, M.;
UΑ
     Slomiany, M.C.; Lienard, L.; Wattebled, F.; D'Hulst, C.; Ball, S.
     Universite des Sciences et Technologies de Lille, Villeneuve, France.
CS
ΑV
     DNAL (450 P692)
     Plant physiology, Aug 1999. Vol. 120, No. 4. p. 1005-1014
     Publisher: Rockville, MD: American Society of Plant Physiologists, 1926-
     CODEN: PLPHAY; ISSN: 0032-0889
NTE
     Includes references
     Maryland; United States
     Article; Conference
DT
     U.S. Imprints not USDA, Experiment or Extension
FS
LA
     English
L3
     ANSWER 5 OF 7 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 3
     1999:431909 BIOSIS
AN
     PREV199900431909
DN
     Genetic and biochemical evidence for the involvement of alpha-
TI
     1,4 glucanotransferases in amylopectin
     synthesis.
     Colleoni, Christophe; Dauvillee, David; Mouille, Gregory; Buleon, Alain;
ΑU
     Gallant, Daniel; Bouchet, Brigitte; Morell, Matthew; Samuel, Michael;
     Delrue, Brigitte; d'Hulst, Christophe; Bliard, Christophe; Nuzillard,
     Jean-Marc; Ball, Steven (1)
     (1) Laboratoire de Chimie Biologique, Unite Mixte de Recherche du Centre
     National de la Recherche Scientifique no. 8576, Universite des Sciences et
     Technologies de Lille, 59655, Villeneuve D'Ascq cedex France
SO
     Plant Physiology (Rockville), (Aug., 1999) Vol. 120, No. 4, pp. 993-1003.
     ISSN: 0032-0889.
DT
     Article
     English
LΑ
     English
SL
L3
     ANSWER 6 OF 7 FSTA COPYRIGHT 2002 IFIS
     2000(02):L0059
AN
                      FSTA
TI
     Biochemical characterization of the Chlamydomonas reinhardtii .
     alpha.-1,4 glucanotransferase
     supports a direct function in amylopectin biosynthesis.
     Colleoni, C.; Dauvillee, D.; Mouille, G.; Morell, M.; Samuel, M.;
ΑU
     Slomiany, M. C.; Lienard, L.; Wattebled, F.; d'Hulst, C.; Ball, S. Correspondence (Reprint) address, S. Ball, Lab. de Chimie Biol., Unite
     Mixte de Recherche du Cent. Nat. de la Recherche Sci. No. 8576, Univ. des
     Sci. et Tech. de Lille, 59655 Villeneuve d'Ascq Cedex, France. Fax
     33-3-20-43-65-55. E-mail steven.ball(a)univ.lillel.fr
     Plant Physiology, (1999), 120 (4) 1005-1014, 23 ref.
SO
     ISSN: 0032-0889
DT
     Journal
LA
     English
L3
      ANSWER 7 OF 7 FROSTI COPYRIGHT 2002 LFRA
AN
               FROSTI
      Method for obtaining modified polysaccharides.
TI
IN
      Ball S.
PA
      Biogemma
```

SO PCT Patent Application
PI WO 9966056 A1
AI 19990616
PRAI France 19980616
DT Patent
LA French
SL French; English